

**Remarks****Preliminary Remarks**

The Applicants submit that their last response, submitted on September 22, 2003, was a *bona fide* attempt to reply, especially considering generic claim 23 embraced species II, along with species I and III.

In efforts to be responsive to the Patent Office, the Applicants have added claims that clearly encompass Species II (claims 48-67), including reinstating original claim 20 as new claim 67, and added the generic claim 48. Claim 48 is a generic claim directed to an implantable sensor device that can detect an energy stimulus *in vivo* and respond to the stimulus by altering its geometry or conformation. The energy stimulus is either the result of some physiologic event or derived from an *ex vivo* source of energy. This generic claim embraces species II and also embraces nonelected species I and III. Accordingly, the Applicants seek to add claims 48-67.

The Applicants have amended claims directed towards the nonelected species so that the generic claim 48 can act as a proper linking claim. The Applicants have canceled claims 23-27 and amended claims 28-47 to depend from claim 48, which remain directed towards species I and III. The Applicants submit that claim 48 is a generic claim that embraces all the restricted species, I-III, and represents a linking claim that links a reasonable number of species. See MPEP section 809.02. The Applicants respectfully request rejoinder of claims 28-47 upon the allowance of generic claim 48.

**Arguments**

The rejection under 35 USC §112 is moot in view of the amendments presented herein.

**The Rejection Under 35 USC 102(b) over Flomenblit et al. (US Pat. No. 5,562,641) Should be Withdrawn**

The rejection under 35 USC 102(b) over Flomenblit et al. (US Pat. No. 5,562,641) should be withdrawn because Flomenblit et al. fails to disclose all elements of the invention as claimed in the pending claims as amended. Flomenblit et al. discloses a medical stent made of a two way shape memory alloy with two transition temperatures

that facilitates removal, which is starkly different from the present invention that includes a sensor to detect and respond to *in vivo* physiological events and *ex vivo* energy sources, which allows for imaging and automated remodeling or conformation alterations. Furthermore, beyond failing to disclose a sensor, the stent disclosed by Flomenblit only reacts to temperature changes due to its shape memory properties.

Flomenblit et al. fails to disclose the sensor element of the invention and methods of detecting a clinically physiological event *ex vivo* using the same sensor element, and therefore fails to anticipate the present claims. Contrary to the conclusion of the Patent Office, Flomenblit et al. fails to disclose a sensor in col. 2, lines 62-66. In fact, those lines only disclose the "two-way shape memory alloy" such as Ni-Ti, Ni-Ti-X (X being V, Co, Cu, Fe), Cu-Al-Ni, or Cu-Zn-Al. The two phase transition property is disclosed to allow for removal of the stent or for changing its position by introduction of cooling liquid. See col. 4, lines 53-58. Moreover, the Examiner's reference to use of RF irradiation as an exogenous energy stimulus (col 5, lines 48-52) is similarly misplaced because the RF energy is employed to inductively heat the stent element, causing the nitinol to heat and excursion beyond a transition temperature to enlarge the stent. There is no disclosure in Flomenblit, et al. that the stent is able to return a signal to an *ex vivo* detector to provide information concerning its *in vivo* state. Thus, Flomenblit, et al. is devoid of any teaching, express or implied, of a sensor element, whether an integral sensor region, a binding region or a cantilever member.

Accordingly, the Applicants respectfully request withdrawal of the 102(b) rejection over Flomenblit et al.

### **Conclusion**

Based upon the foregoing amendments and arguments, pending claims 48-67 are in condition for allowance and Applicants respectfully request allowance of these claims and issuance of a Notice of Allowability. Additionally, upon allowance of generic claim 48, the Applicants respectfully request rejoinder of claims 28-47 as they are directed towards nonelected species that are embraced and linked by generic claim 48.

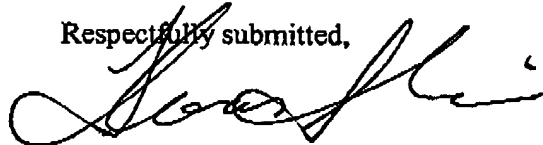
This response is timely as it is submitted with a Request for Extension of Time and an Amendment Transmittal along with appropriate fees; however, the Commissioner

is hereby authorized to charge any fees which may be required, or credit any overpayment, to Rosenbaum & Associates, P.C. deposit account No. 18-2000.

Applicant draws the Examiner's attention to the Notice of Entity Status and Notice of Change of Address of Attorney of Record, which are being filed concurrently herewith.

Should the Examiner require any further information or wish to discuss any aspect of this Response, the Examiner is encouraged to telephone the undersigned at the telephone number set forth below.

Respectfully submitted,



Thomas S. Kim  
Reg. No. 51,009

April 6, 2004

**ROSENBAUM & ASSOCIATES, P.C.**  
650 Dundee Road  
Suite 380  
Northbrook, IL 60062  
Tel. (847) 770-6000  
Fax. (847) 770-6006  
E-mail: tkim@biopatentlaw.com